

# **Weather Station**

model 02007





CO			-
		4 F F 4	31

Unpacking Instructions	2
Package Contents	2
Product Registration	2
Features & Benefits: Sensor	2
Features & Benefits: Display	3
Setup	6
Sensor Setup	6
Display Setup	7
Setup Preferences	8
Intelli Tima Clack	Ω

Backlight Settings	9
Placement Guidelines	10
Using the Weather Station	11
Troubleshooting	12
Care & Maintenance	13
Replace Intelli-Time® Battery	14
Calibration	14
Specifications	15
FCC Information	15
Customer Support	16
Warranty	16

**Questions?** Contact Customer Support at (877) 221-1252 or visit www.**AcuRite**.com.

SAVE THIS MANUAL FOR FUTURE REFERENCE.

# ACU RITE

Congratulations on your new AcuRite product. To ensure the best possible product performance, please read this manual in its entirety and retain it for future reference.

## **Unpacking Instructions**

Remove the protective film that is applied to the LCD screen prior to using this product. Locate the tab and peel off to remove.

## **Package Contents**

- 1. Display unit
- 2. Outdoor sensor
- 3. Power adapter
- 4. Instruction Manual



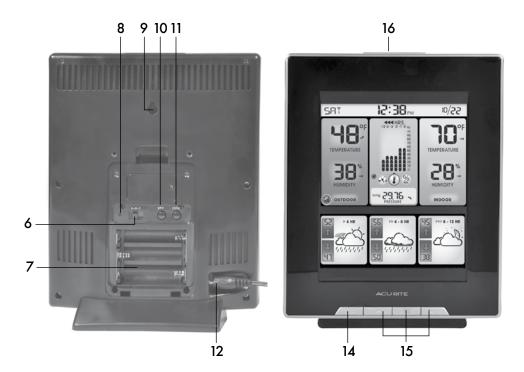
#### **Features & Benefits**



#### **OUTDOOR SENSOR**

- 1. Integrated Hanger For easy placement.
- 2. Wireless Signal Indicator Flashes when data is being sent to the display unit.
- 3. Battery Compartment
- 4. A-B-C Switch ID code that must match display's A-B-C switch to ensure units synchronize.
- 5. Battery Compartment Cover

#### **Features & Benefits**



#### **BACK OF DISPLAY UNIT**

#### 6. A-B-C Switch

ID code that must match sensor's A-B-C switch to ensure units synchronize.

- 7. Battery Compartment
- 8. **RESET Button**Full reset to factory defaults.
- Integrated Hang Hole for easy mounting.
- 10. GEO Button
  Set geographic region preference.
- 11. ZONE Button

Set time zone preference.

- 12. Plug-in for Power Adapter
- 13. Battery Compartment Cover (not shown)

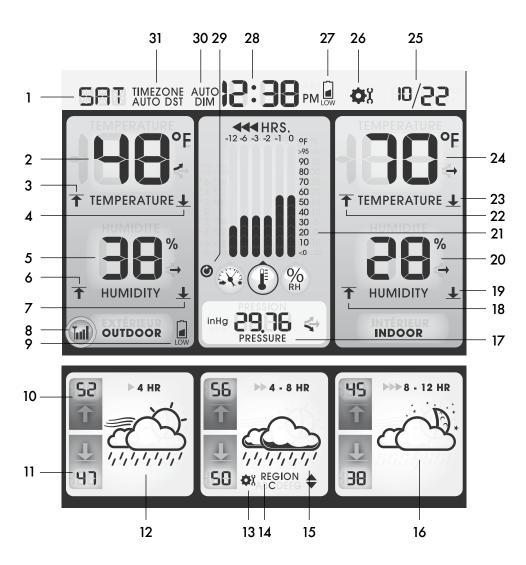
#### FRONT OF DISPLAY UNIT

#### 14. HISTORY CHART Mode

Press to toggle between pressure, outdoor temperature or outdoor humidity on History Chart. Press and hold for 4 seconds to enter auto-cycle mode (5 second rotation).

- 15. "^", "♥\" & "∨" Buttons for setup preferences.
- 16. Backlight Button (top of display unit)

#### **Features & Benefits**



#### **DISPLAY UNIT**

- 1. Day of the Week
- 2. Current Outdoor Temperature
  Arrow icon indicates direction
  temperature is trending.
- Outdoor High Temperature Record Indicates highest outdoor temperature recorded since midnight.
- 4. Outdoor Low Temperature Record Indicates lowest outdoor temperature recorded since midnight.
- Current Outdoor Humidity
   Arrow icon indicates direction humidity is trending.
- Outdoor High Humidity Record Indicates highest outdoor humidity recorded since midnight.
- Outdoor Low Humidity Record Indicates lowest outdoor humidity recorded since midnight.
- 8. Outdoor Sensor Signal Strength
- 9. Low Sensor Battery Indicator
- 10. Forecasted High Temperature
- 11. Forecasted Low Temperature
- 12. Up to 4 Hour Weather Forecast
  Precision Forecasting combines
  regional trends with data from your
  outdoor sensor to generate your
  personal forecast.
- 13. GEO SET Icon Flashes to indicate Geo Zone setup mode.
- 14. Geographic Region Selection for setup preferences.
- 15. 4 to 8 Hour Weather Forecast
- 16. 8 to 12 Hour Weather Forecast
- 17. Barometric Pressure
   Arrow icon indicates direction pressure is trending.

- 18. Indoor High Humidity Record Indicates highest indoor humidity recorded since midnight.
- 19. Indoor Low Humidity Record Indicates lowest indoor humidity recorded since midnight.
- 20. Current Indoor Humidity

  Arrow icon indicates direction humidity is trending.
- 21. Multi-Variable History Chart
  Displays the past 12 hours of data
  for pressure, outdoor temperature or
  outdoor humidity.
- 22. Indoor High Temperature Record Indicates highest indoor temperature recorded since midnight.
- 23. Indoor Low Temperature Record Indicates lowest indoor temperature recorded since midnight.
- 24. Current Indoor Temperature Arrow icon indicates direction temperature is trending.
- 25. Date
- **26. SET Icon**Flashes to indicate setup mode.
- 27. Display Unit Low Battery Indicator
- 28. Intelli-Time® Clock
- 29. Auto-Cycle Mode Indicator
- 30. AUTO DIM Indicator
- 31. Time Zone & Daylight Saving Time for setup preferences, shown only during setup.

## **Sensor Setup**

Set the A-B-C Switch

The A-B-C switch is located inside the battery compartment. It can be set to A, B or C. However, you must select the same letter choices for both the sensor and the display unit in order for the units to synchronize.

Install or Replace Batteries

AcuRite recommends high quality alkaline or lithium batteries in the outdoor sensor for the best product performance. Heavy duty or rechargeable batteries are not recommended.

The sensor requires lithium

batteries in low temperature conditions. Cold temperatures can cause alkaline batteries to function improperly. Use lithium batteries in the sensor for temperatures below -4°F / -20°C.

- Slide off the battery compartment cover. Take note of the A-B-C switch setting inside the battery compartment for display unit setup.
- Insert 2 x AA batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.
- 3. Replace the battery cover.





## **Display Unit Setup**

Set the A-B-C Switch

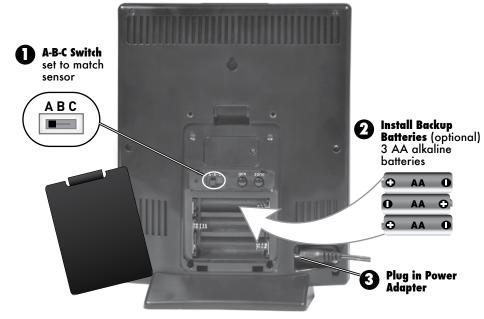
Locate the A-B-C switch inside the battery compartment. Set the A-B-C switch to A, B or C. You must select the same letter choices for both the display unit and the sensor in order for the units to synchronize.

- Install or Replace Backup Batteries (optional)
  - Remove the battery compartment cover.

- Insert 3 x AA alkaline batteries into the battery compartment, as shown.
   Follow the polarity (+/-) diagram in the battery compartment.
- 3. Replace the battery cover.

## 3 Plug in Power Adapter

For the best performance, plug in the power adapter as the main power source for this product.



IMPORTANT: Batteries are a backup power source to preserve records in the event of a power outage. Power adapter recommended as the primary power source to enjoy the full functionality of the product.



# PLEASE DISPOSE OF OLD OR DEFECTIVE BATTERIES IN AN ENVIRONMENTALLY SAFE WAY AND IN ACCORDANCE WITH YOUR LOCAL LAWS AND REGULATIONS.

BATTERY SAFETY: Clean the battery contacts and also those of the device prior to battery installation. Remove batteries from equipment which is not to be used for an extended period of time. Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries from the device. Dispose of used batteries properly. Only batteries of the same or equivalent type as recommended are to be used. DO NOT incinerate used batteries. DO NOT dispose of batteries in fire, as batteries may explode or leak. DO NOT mix old and new batteries or types of batteries (alkaline/standard). DO NOT use rechargeable batteries. DO NOT recharge non-rechargeable batteries. DO NOT short-circuit the supply terminals.

## Setup: Geographic Region

Select your geographic region according to the map (pictured right) by pressing the "GEO" button, located on the back of the unit in the battery compartment. The letters for each corresponding GEO region are shown on the display screen. Geographic region must be set in order for Precision Forecasting to function properly. \*The "\$\frac{1}{2}\text{N}" icon and geographic region letter are only visible in GEO set mode. You will automatically exit GEO set mode if no buttons are pressed for 10 seconds. Enter GEO set mode at any time by pressing the "GEO" button located inside the battery compartment.



#### Intelli-Time® Clock

Intelli-Time clock and calendar are pre-programmed to the correct time and date, and update automatically for Daylight Saving Time. All you need to do is select your time zone using the "ZONE" button.

## Setup: Time, Date, Units & Language

Press the "N" button, located on the front of the display unit, to enter SET MODE. Once in set mode, the preference you are currently setting will blink on the display.

To adjust the currently selected (flashing) item, press and release the "^" or "V" buttons (press and HOLD to fast adjust).

To save your adjustments, press and release the "N" button again to adjust the next preference. The preference set order is as follows:

TIME ZONE ( PST MST CST EST AST HAST AKST)
AUTO DST (Daylight Saving Time ON or OFF)\*

CLOCK HOLD

**CLOCK HOUR** 

CLOCK MINUTE

CALENDAR MONTH

CALENDAR DATE

CALENDAR YEAR

UNITS: TEMPERATURE (°F or °C)

UNITS: PRESSURE (inHg or hPa)

LANGUAGE (English or French)

\*If you live in an area that observes DST, DST should be set to ON even if it is not currently Daylight Saving Time.

You will automatically exit SET MODE if no buttons are pressed for 30 seconds. Enter SET MODE at any time by pressing the "\display" button.

## **Display Backlight Settings**

This weather station's color display features three different lighting settings: High (100%) brightness, Medium (60%) brightness and Low (30%) brightness

Using battery power alone, the backlight is available momentarily for 10 seconds by pressing the "BACKLIGHT" button.

When display is powered with the power adapter, backlight remains on at 100% brightness. Press "BACKLIGHT" button once to dim to 60% brightness; press again to dim to 30%, press a 3rd time to enter "AUTO DIM" mode. AUTO DIM will appear to the left of the time.

AUTO DIM MODE: Automatically adjusts display brightness based on time of day & year.		
MARCH 11- NOVEMBER 4	6:00 a.m 9:00 p.m. = 100% brightness	
	9:01 p.m 5:59 a.m.= 30% brightness	
NOVEMBER 5 - MARCH 10	7:30 a.m 7:00 p.m.= 100% brightness	
	7:01 p.m 7:29 a.m. = 30% brightness	

## **Placement for Maximum Accuracy**

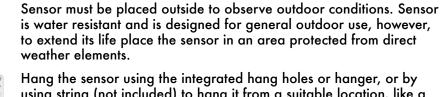
AcuRite sensors are sensitive to surrounding environmental conditions. Proper placement of both the display unit and outdoor sensor are critical to the accuracy and performance of this product.

#### **Display Unit Placement**



Place display unit in a dry area free of dirt and dust. Display stands upright for tabletop use or is wall-mountable. For wall mounting, hang using the keyhole located on back of the unit.

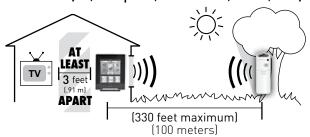
#### **Outdoor Sensor Placement**



Hang the sensor using the integrated hang holes or hanger, or by using string (not included) to hang it from a suitable location, like a well covered tree branch. The best location is 4 to 8 feet above the ground with permanent shade and plenty of fresh air to circulate around the sensor.

## **Important Placement Guidelines**

- To ensure accurate temperature measurement, place units out of direct sunlight and away from any heat sources or vents.
- Display unit and outdoor sensor must be within 330 ft (100 m) of each other.
- To maximize wireless range, place units away from large metallic items, thick walls, metal surfaces, or other objects that may limit wireless communication.
- To prevent wireless interference, place both units at least 3 ft (.9 m) away from electronic devices (TV, computer, microwave, radio, etc.).



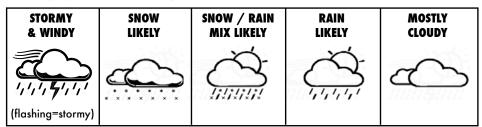
## **Setup is Complete**

The sensor will now synchronize with the display unit. It may take a few minutes for synchronization to complete. NOTE: It will take up to 4 hours to generate a weather forecast after initial setup.

## **Using the Weather Station**

## **Precision Weather Forecasting**

AcuRite's Precision Forecasting provides your personal forecast of morning, noon & night (4 hour, 4 to 8 hour and 8 to 12 hour) weather conditions. The patent-pending technology combines regional weather patterns with data measured by a sensor in your yard. It generates a forecast with pinpoint accuracy - personalized for your exact location.



View the complete list of icons at www.AcuRite.com/acurite-icons

## **Multi-Variable History Chart**

The multi-variable history chart lets you monitor the change in conditions over the last 12 hour time period (-12, -6, -3, -2, -1, 0). Toggle between barometric pressure, outdoor temperature and outdoor humidity readings. Press and hold "III" for 4 seconds to enter auto-cycle mode (5 second rotation).

#### **Barometric Pressure**

Subtle variations in barometric pressure greatly impact the weather. This weather center displays the current pressure with an arrow icon to indicate the direction the pressure is trending (FALLING, STEADY, or RISING). The multivariable history chart lets you monitor the change in pressure over time.

## **High & Low Records**

The "\" and "\" buttons, located on the front of the display unit, display minimum and maximum recordings for outdoor and indoor temperature and humidity. To view the MINIMUM temperature and humidity readings, press and release the "\" button. The "\precept" icon appears on the display next to the low records. To view the MAXIMUM temperature and humidity readings, press and release the "\" button. The "\precept" icon appears on the display next to the high records.

To reset the MINIMUM records, press and hold the "\(\nsigma\)" button while viewing the minimum records. Dashes will display to confirm all minimum values have been cleared.

To reset the MAXIMUM records, press and hold the "^" button while viewing the maximum records. Dashes will display to confirm all maximum values have been cleared.

# **Troubleshooting**

iroubleshooting		
No outdoor sensor reception	If the wireless signal indicator shows no bars:  • Relocate the display unit and/or the outdoor sensor. The units must be within 330 ft (100 m) of each other.  • Make sure both units are placed at least 3 feet (.9 m) away from electronics that may interfere with the wireless communication (such as TVs, microwaves, computers, etc).  • Use standard alkaline batteries (or lithium batteries in sensor when temperature is below -4°F/-20°C). Do not use heavy duty or rechargeable batteries. NOTE: It may take up to 20 minutes for display unit and sensor to synchronize after batteries are replaced.	
Display screen not working	<ul> <li>Check that the batteries are installed correctly. Batteries may need to be replaced.</li> <li>Reset display by pressing the RESET button, located in the battery compartment on the display unit. Time and date will need to be entered after a reset.</li> <li>Forecast will be blank for first 4 hours after battery installation.</li> </ul>	
Outdoor temperature is flashing or showing dashes	Flashing of the outdoor temperature is generally an indication of wireless interference.  1. Bring both the sensor and display unit indoors and remove batteries/power adapter from both.  2. Make sure the A-B-C switch on both units match.  3. Reinstall batteries in the outdoor sensor.  4. Re-connect AC adapter and/or reinstall batteries in the display unit.  5. Let the units sit within a couple feet of each other for about 20 minutes to gain a strong connection.	
Inaccurate temperature or humidity	<ul> <li>Make sure both the display unit and sensor are placed out of direct sunlight and away from any hear sources or vents (see page 10).</li> <li>Make sure both units are positioned away from any sources of moisture.</li> </ul>	
Inaccurate barometric pressure	It may take up to 14 days for the pressure to calibrate to your location.	

## **Troubleshooting**

<ul> <li>Weather Forecast icons predict conditions for the future, not current conditions.</li> <li>Forecast will be blank for first 4 hours after battery installation.</li> <li>Make sure your GEO region is correct. If you live close to a region border, try testing both regions to see which generates the most appropriate forecast for your location.</li> <li>Make sure time, date, GEO region, temperature, humidity and pressure are accurate. Note: It may take up to 14 days for the pressure to calibrate to your location.</li> <li>Calibrate the forecast (see page 14).</li> <li>If forecast reads inaccurately after all other troubleshooting steps have been attempted, press and release the "RESET" button (inside battery compartment), time and date will need to be entered after a reset. Next, press GEO button to toggle through each of the regions (A-B-C-D-E-F-G) and back to your correct region.</li> </ul>
The Intelli-Time battery needs to be replaced (see page 14). Once the new battery is installed, time and date will need to be set manually.

If your AcuRite product does not operate properly after trying the troubleshooting steps, visit www.AcuRite.com or call (877) 221-1252 for assistance.

#### Care & Maintenance

#### **Display Unit Care**

Clean with a soft, damp cloth. Do not use caustic cleaners or abrasives. Keep away from dust, dirt and moisture. Clean ventilation ports regularly with a gentle puff of air.

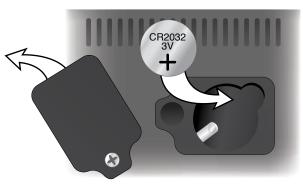
#### **Outdoor Sensor Care**

Clean with a soft damp cloth. Do not use caustic cleaners or abrasives.

## Replace Intelli-Time Clock Battery

Intelli-Time technology is powered by a pre-installed coin-cell battery that stores the time and date settings. The battery has a shelf life of several years. To replace the Intelli-Time battery:

 Locate the coin cell battery compartment door on the back of the display unit. Unscrew and remove the compartment cover.



- 2. Insert 1 x CR2032 coin cell battery into the battery compartment, as shown. Install battery with "+" positive terminal facing OUT.
- 3. Screw in the battery cover.



WARNING: THIS PRODUCT CONTAINS A BUTTON-CELL BATTERY. IF SWALLOWED, IT COULD CAUSE SEVERE INJURY OR DEATH IN JUST 2 HOURS.

SEEK MEDICAL ATTENTION IMMEDIATELY IF INGESTED.



#### **Calibration**

#### **Calibrate Weather Forecast**

The forecast can be calibrated on the display unit to improve accuracy when sensor placement or environmental factors impact your data accuracy. The calibration increases or decreases the amount of moisture in the forecast algorithm. For example, if you feel the forecast is showing rain too often you may want to remove 10% of the moisture from the forecast equation.

- To enter calibration mode, press and HOLD the "^" and "∨" buttons for at least 5 seconds.
- 2. The " \( \bar{\pi} \) " will begin flashing, indicating it is ready to be calibrated.
- 3. Press the "^" button to increase moisture in the forecast or press the "\" button to remove moisture from the forecast.
- 4. Press the " " button to confirm the calibration adjustment, or after 20 seconds of inactivity the display will automatically save your adjustments and exit calibration mode.

## **Specifications**

TEMPERATURE RANGE	Outdoor: -40°F to 158°F; -40°C to 70°C		
	Indoor: 32°F to 122°F; 0°C to 50°C		
HUMIDITY RANGE	Outdoor: 1% to 99% RH		
HUMIDITT KANGE	Indoor: 1% to 99% RH		
WIRELESS RANGE	330 ft / 100 m depending on home construction materials		
<b>OPERATING FREQUENCY</b>	<b>Y</b> 433 MHz		
POWER	Display: 5v power adapter 3 x AA alkaline batteries (optional)		
	Sensor: 2 x AA alkaline or lithium batteries		

#### **FCC Information**

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions:

1- This device may NOT cause harmful interference, and

2- This device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference, and (2) This device must accept any interference received, including interference that may cause undesired operation of the device.

#### **Customer Support**

AcuRite customer support is committed to providing you with best-inclass service. **For assistance**, please have the model number of this product available and contact us in any of the following ways:



(877) 221-1252



# 24/7 support at www.**AcuRite**.com

- Installation Videos
- ► Register your Product
- ► Instruction Manuals
- ▶ Support User Forum
- Replacement Parts
- ► Submit Feedback & Ideas

# **IMPORTANT**

PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

#### **PRODUCT REGISTRATION**

Register online to receive 1 year warranty protection

www.AcuRite.com



## **Limited One Year Warranty**

At AcuRite, we proudly uphold our commitment to quality technology. Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase.

We recommend that you visit us at www.AcuRite.com for the fastest way to register your product. However, product registration does not eliminate the need to retain your original proof of purchase in order to obtain warranty benefits.

Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase. Remedy for breach of this warranty is limited to repair or replacement of the defective item(s). Any product which, under normal use and service, is proven to breach the warranty contained herein within ONE YEAR from date of sale will, upon examination by Chaney, and at its sole option, be repaired or replaced by Chaney. Transportation costs and charges for returned goods shall be paid for by the purchaser. Chaney hereby disclaims all responsibility for such transportation costs and charges. This

warranty will not be breached, and Chaney will give no credit for products it manufactures which have received normal wear and tear, been damaged (including by acts of nature), tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

The above-described warranty is expressly in lieu of all other warranties, express or implied, and all other warranties are hereby expressly disclaimed, including without limitation the implied warranty of merchantability and the implied warranty of fitness for a particular purpose. Chaney expressly disclaims all liability for special, consequential or incidental damages, whether arising in tort or by contract from any breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Chaney further disclaims all liability from personal injury relating to its products to the extent permitted by law. By acceptance of any of Chaney's products, the purchaser assumes all liability for the consequences arising from their use or misuse. No person, firm or corporation is authorized to assume for Chaney any other liability in connection with the sale of its products. Furthermore, no person, firm or corporation is authorized to modify or waive the terms of this paragraph, and the preceding paragraph, unless done in writing and signed by a duly authorized agent of Chaney. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For in-warranty claims: Chaney Instrument Co. 965 Wells St., Lake Geneva, WI 53147







**Temperature** & Humidity



Weather Alert Radio



Kitchen **Thermometers** & Timers



Clocks

## It's more than accurate, it's ACUPRITE.

AcuRite offers an extensive assortment of precision instruments, designed to provide you with information you can depend on to Plan your day with confidence™.

# www.**AcuRite**.com